



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,224	03/01/2002	Ajay Kumar	5681-12100	6928

7590 03/24/2005

Robert C. Kowert  
Conley, Rose, & Tayon, P.C.  
P.O. Box 398  
Austin, TX 78767

EXAMINER
----------

LIN, KELVIN Y

ART UNIT	PAPER NUMBER
----------	--------------

2142

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/087,224	<b>Applicant(s)</b> KUMAR ET AL.	
	<b>Examiner</b> Kelvin Lin	<b>Art Unit</b> 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

*ai*

## **Detailed Action**

### ***Claim Rejections - 35 USC § 101***

1. Claims 21-26 rejected under 35 U.S.C. 101 because :

Claims 21-26 are directed to non-statutory subject matter as being drawn to a Computer program per se. Programs per se are not one of the statutory classes of invention. Programs must be tangibly embodied on a computer readable medium and be drawn to a practical application in order to be eligible for patent protection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. In Claims 2, 3, 9, 13, and 17, the phrase “binary differencing of a binary representation” lack sufficient antecedent basis.
3. Similarly, in Claims 4, 10, 14, and 18, the phrase “object graph differencing ” lack sufficient antecedent basis.
4. The above noted problems are not necessarily an exhaustive listing, but a meant to be exemplary of the types of errors present. It is incumbent upon an applicant to ensure that any amendment filed resolves all deficiencies and places the claims in compliance with 35 USC 112.
5. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-26 are rejected under 35 USC 102(e) as being anticipated by Haley et al., (US Patent No. 6529941).

8. Regarding claim 1, Haley teaches a system, comprising:

- a first node of a distributed store comprising a primary state of session data configured for access by a plurality of application servers, wherein the session data comprises a plurality of attributes (Haley, col.6, l.12-15, “ .. communicating with the first session manager, then ... with the remote session manager...”, fig.7, col.7, l.2-19, “ the session manager comprises the application objects repository (distributed store), and session component comprises a plurality of attributes etc..”, col.10, l.38-42, “.. one of application process (application server), .. interact with users” ) ;
- another node comprising a back-up instance of the primary state

(Haley, col. 7, l.10-24, “.. information objects that contain exact reproduction of the information in the object that application process used to represent..”).

- wherein the system is configured to:
- compare the primary state to a benchmark of the primary state to generate a subset of the attributes of the session data that have been modified in the primary state (Haley, col. 7, l.25-29); and
- synchronize the back-up instance of the primary state with the primary state using the subset of the attributes of the session data (Haley, col. 7, l.29-36).

9. Regarding claim 2, Haley further discloses a system as recited in claim 1, wherein, to compare the primary state to the benchmark of the primary state, the system is further configured to perform binary differencing of a binary representation of the primary state and a binary representation of the benchmark of the primary state to determine the modified attributes (Haley, col. 7, l.33-36, “.. in which changes made in the application process’s hierarchy of .. is reflected in session manager’s info object and vice-versa, which means binary differencing of ...”).

10. Regarding claim 3, Haley further discloses a system as recited in claim 2, wherein, to perform binary differencing, one or more portions of the binary representation of the primary state are compared to corresponding portions of the binary representation of the benchmark of the primary state to determine the

modified attributes (Haley, col. 7, l.33-36, "... in which changes made in the application process's hierarchy of .. is reflected in session manager's info object and vice-versa, which means binary differencing of ...").

11. Regarding claim 4, Haley further discloses a system as recited in claim 1, wherein, to compare the primary state to a benchmark of the primary state, the system is further configured to perform object graph differencing of an object graph representation of the primary state and an object graph representation of the benchmark of the primary state to determine the modified attributes (Haley, col. 7, l.33-36, " .... binary differencing is expressed in Fig.8" )
12. Regarding claim 5 has similar limitation as claim 4. Therefore, Claim 5 is rejected for the same reasons set forth in the rejection of claim 4.
13. Regarding claim 6, Haley further discloses a system as recited in claim 1, wherein the another node comprising a back-up instance of the primary state is another node of the distributed store (Haley, col.7, l. 5-8).
14. Regarding claims 7-10 have similar limitation as claims 1-4. Therefore, Claims 7-10 are rejected for the same reasons set forth in the rejection of claims 1-4.
15. Regarding claims 11-14 have similar limitation as claims 1-4. Therefore, Claims 7-10 are rejected for the same reasons set forth in the rejection of claims 1-4.
16. Regarding claims 15-20 have similar limitation as claims 1-6. Therefore, Claims 15-20 are rejected for the same reasons set forth in the rejection of claims 1-6.
17. Regarding claims 21-26 are non-statutory subject matter. Therefore, claims 21-26 are rejected.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to application's disclosure.

- Harple et al., (US Patent No. 6195091) Apparatus for Collaborative Computing.
- Asai et al. (US Patent No. 6760765) Cluster Server Apparatus.
- Freed et al., (US Patent No. 20030014650) Load Balancing Secure Sockets Layer Accelerator.
- NPL – Roh et al., A switchable session management for the distributed multimedia-on-demand system, Protocols for Multimedia Systems – Multimedia Networking, 1997, Proceedings, IEEE Conference on 24-27 Nov. 1997, pp.102-111.

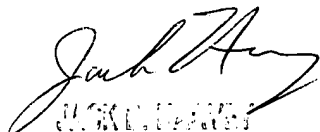
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 703-605-1726. The examiner can normally be reached on Flexible 4/9/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2142

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kyl  
3/17/05



JACK H. HARGIS  
SUPERVISOR, PATENT EXAMINER